



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

DEC 17 2013

Woodrow Smeck, Superintendent  
Sequoia and Kings Canyon National Parks  
47050 Generals Highway  
Three Rivers, CA 93271

Subject: Draft Environmental Impact Statement for the Restoration of Native Species in High Elevation Ecosystems, Sequoia and Kings Canyon National Parks, CA (CEQ #20130290)

Dear Mr. Smeck:

The Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Restoration of Native Species in High Elevation Ecosystems for Sequoia and Kings Canyon National Parks. Our review and comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The plan proposes to restore clusters of waterbodies to their naturally fishless states in high elevation ecosystems in Sequoia and Kings Canyon National Parks through physical and piscicide treatments. The plan would be implemented over 25 to 35 years, with internal evaluations and adaptive management scheduled every 5 to 10 years. We understand that action is needed at this time due to the vulnerability to extinction of two species of mountain yellow-legged frogs, impending climate change, and the importance of restoration and protection of wilderness character and native plants, animals and processes.

EPA is rating the document "Lack of Objections" (LO), (see enclosed "*Summary of Rating Definitions*"). The Draft EIS provides a thorough analysis of the benefits and impacts of using CFT Legumine to accomplish the project's objectives. Risk is characterized thoroughly, and mitigations are described. The National Park Service should be aware, however, that CFT Legumine is not currently registered in California; therefore, it can no longer be legally brought into the state, and available stocks are likely to be limited. It is unclear whether NPS has access to a sufficient quantity of this product to complete the project, as proposed. Please see the enclosed Detailed Comments.

We appreciate the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send one hard copy or one CD to the address above (mail code: CED-2). Should you have any questions regarding our comments, please contact me at (415) 972-3521, or contact Stephanie Skophammer, the lead reviewer for the project. Stephanie can be reached at (415) 972-3098 or [skophammer.stephanie@epa.gov](mailto:skophammer.stephanie@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen Martyn Goforth".

Kathleen Martyn Goforth, Manager  
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions  
Detailed Comments



## **SUMMARY OF EPA RATING DEFINITIONS\***

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

### **ENVIRONMENTAL IMPACT OF THE ACTION**

#### ***“LO” (Lack of Objections)***

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### ***“EC” (Environmental Concerns)***

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### ***“EO” (Environmental Objections)***

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### ***“EU” (Environmentally Unsatisfactory)***

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

### **ADEQUACY OF THE IMPACT STATEMENT**

#### ***Category “1” (Adequate)***

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### ***Category “2” (Insufficient Information)***

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### ***Category “3” (Inadequate)***

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.



**EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE RESTORATION OF NATIVE SPECIES IN HIGH ELEVATION AQUATIC ECOSYSTEMS PLAN, SEQUOIA AND KINGS CANYON NATIONAL PARK, CA DECEMBER 17, 2013**

**Proposed Piscicide is not Currently Registered**

The Preferred Alternative in the Draft EIS would use the piscicide CFT Legumine. The National Park Service states that this is the only proposed piscicide treatment evaluated in the plan because it is the only piscicide registered for use in California. This registration information is incorrect. The active ingredient in CFT Legumine is rotenone. According to the California Department of Pesticide Regulation, there are no active registrations for rotenone in California. The last rotenone piscicide registration became inactive on December 31, 2012. While a limited amount of the product may be available on retailer/distributor shelves for legal sale in California until 12/31/14, the registrants of that product should not be shipping any new product into California at this time. It is not clear whether or not the NPS has access to a sufficient supply of CFT Legumine to complete the project as proposed.

The Draft EIS states that, if another piscicide becomes available for use in California, NPS staff would assess the appropriateness of its use in Sequoia Kings Canyon National Park, and that assessment would include opportunities for public review and comply with existing laws, policies and plans (p. 58).

***Recommendation:***

EPA recommends that NPS clarify its strategy for obtaining CFT Legumine for use as part of this Restoration Plan for the next 25-35 years. If the use of another piscicide product may be needed during the life of the plan, that product and use should be evaluated in this EIS and made available for public review and comment. Other products may have different impacts to wildlife and water quality.

**Closure Period**

Lakes targeted for treatment are proposed to be treated to 250 ppb rotenone. No deactivating agent will be used in the lakes (p. 59-60). The Draft EIS suggests a 3-day period before allowing swimming (p.217), which is based on an EPA recommendation of an application of 200 ppb rotenone and dissipation in water that is 25 °C. If the mountain lakes and streams are considerably colder, or the piscicide concentration is higher, then 3 days may not be enough to dissipate below the Level of Concern (LOC).

***Recommendation:***

Consider whether drinking or swimming in treated lakes should be precluded for a longer period, given the treatment level and ambient conditions. If the appropriate closure period would vary depending on treatment level and ambient conditions, the Final EIS should describe the chemical concentrations that must be met (e.g., not detected, or below some threshold) before the lake can be re-opened, and explain how it would be determined that those conditions have been met.

**Visitor Notification**

Page 216 of the Draft EIS describes how visitors will be kept out of treatment areas, including rivers and lakes. The Park Service expects to notify the public through use of signs at trailheads, ranger stations, when obtaining wilderness permits, as well as field crews who would search for visitors and notify them of the treatment. The document says that “many of the sites are away from popular visitor use areas with little visitation so the only human receptors at risk would be crew members applying the piscicide” (p. 216).

Rotenone is considered highly acutely toxic by inhalation and oral routes of exposure and low acute toxicity by dermal exposure. Inhalation is not a concern for members of the public who may wander into the area after treatment. However, dermal exposure and incidental ingestion from swimming in a treated lake, as well as use of lake water for drinking, should be considered scenarios for all the treated areas, even lakes that may receive little visitation throughout the summer.

***Recommendation:***

The Final EIS should describe specifically how people will be kept out of the remote lakes (not just those in heavily visited areas) targeted for treatment, since the dissipation time may be long (see suggestion above).

We recommend that the NPS post signs in multiple languages appropriate for the typical visitors to Sequoia and Kings Canyon National Park.

**Product Toxicity Data**

Table 1 in Appendix G lists rotenone toxicity values for several species, and for the formulated product, Noxfish. It is not clear why the Noxfish data are shown, since Noxfish is not the product that is proposed for use in this project. Significantly, Noxfish contains the synergist piperonyl butoxide and so would have higher toxicity to fish than would the CFT Legumine product that is proposed to be used.

***Recommendation:***

The Final EIS should include data for CFT Legumine, if available. If not, then some explanation of the difference between Noxfish and CFT Legumine should be given.